

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: PERCH POND	Lake Area (ha):	4.61
Town: LISBON	Maximum depth (m):	5.2
County: Grafton	Mean depth (m):	3.0
River Basin: Connecticut	Volume (m <sup>3</sup> ):	136000
Latitude: 44°15'15" N	Relative depth:	2.1
Longitude: 71°52'30" W	Shore configuration:	1.05
Elevation (ft): 725	Areal water load (m/vr):	6.22
Shore length (m): 800.0	Flushing rate (yr <sup>-1</sup> ):	2.10
Watershed area (ha): 67.3	P retention coeff.:	0.62
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

11 January 1989

5 July 1988

DOM. PHYTOPLANKTON (% TOTAL) #1	DINOBRYON 35%	TABELLARIA 60%
#2	TABELLARIA 20%	COLONIAL GREEN SPP. 20%
#3	STEPHANODISCUS 15%	
PHYTOPLANKTON ABUNDANCE (cells/mL)		800.0
CHLOROPHYLL-A (µg/L)		3.34
DOM. ZOOPLANKTON (% TOTAL) #1	POLYARTHRA 48%	SPARSE - NO DOMINANT
#2	SYNCHAETA 31%	
#3		
ROTIFERS/LITER	201	17
MICROCRUSTACEA/LITER	4	16
ZOOPLANKTON ABUNDANCE (#/L)	233	44
VASCULAR PLANT ABUNDANCE		Sparse
SECCHI DISK TRANSPARENCY (m)		4.5
BOTTOM DISSOLVED OXYGEN (mg/L)	9.9	5.3
BACTERIA (fecal col., #/100 ml) #1		< 10
#2		10
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>): None

CHEMICAL:

Lake: PERCH POND

Town: LISBON

	11 January 1989		5 July 1988		
DEPTH (m)	1.0	3.0	1.5		3.0
pH (units)	6.6	6.5	7.0		7.0
A.N.C. (Alkalinity)	12.5	12.7	11.3		11.3
NITRATE NITROGEN	< 0.05	< 0.05	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.30	0.32	0.27		0.27
TOTAL PHOSPHORUS	0.023	0.022	0.024		0.016
CONDUCTIVITY ( $\mu$ mhos/cm)	41.4	41.8	39.1		39.3
APPARENT COLOR (cpu)	10	11	10		11
MAGNESIUM			1.00		
CALCIUM			4.1		
SODIUM			1.3		
POTASSIUM			0.30		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	5	5	6		6
TN : TP	13	15	11		17
CALCITE SATURATION INDEX			2.7		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1988

D.O. S.D. PLANT CHL TOTAL CLASS

**	2	0	0	2	Oligo.
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COMMENTS:

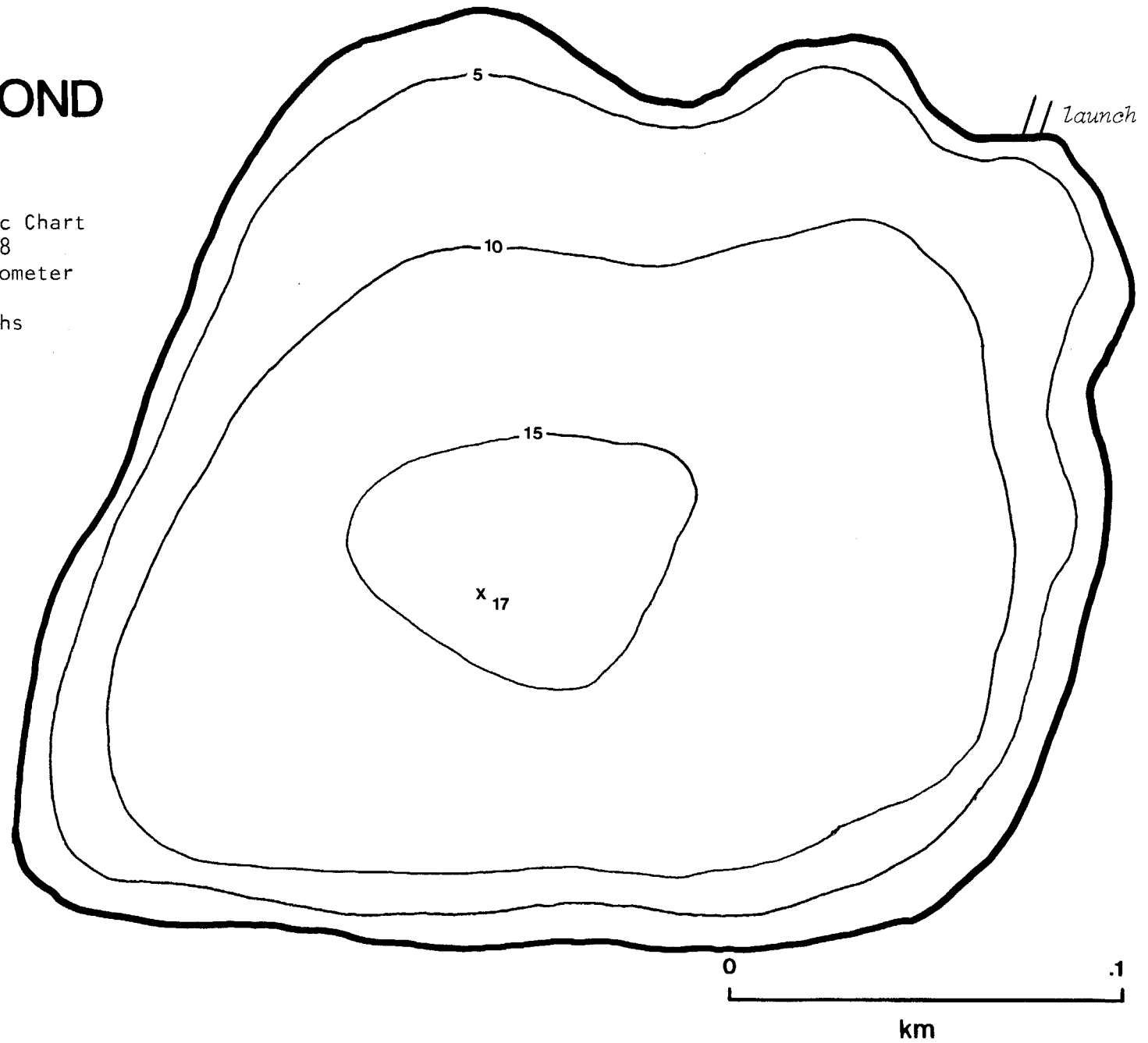
1. Previously known as Hidden Pond.
2. Boat was launched at a beach, amongst swimmers.
3. Blue-greens (45%) and greens (35%) dominated the whole-water phytoplankton classes. Dominant genera were Aphanotheca (30%) and tiny green flagellates (25%).

# PERCH POND

LISBON

Rough Bathymetric Chart  
WSPCD - 1988  
sounded by fathometer

5 ft. isobaths



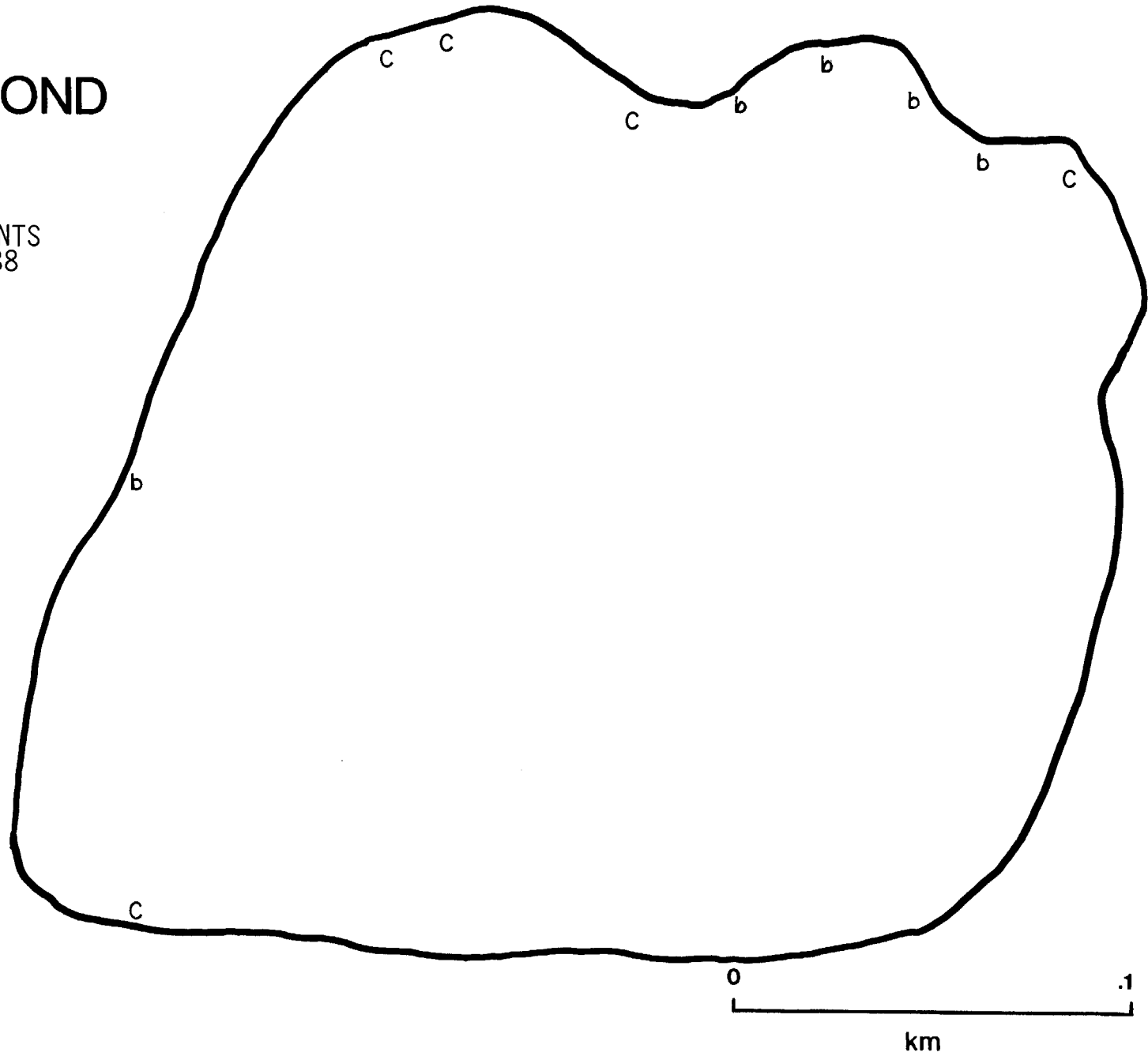
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# PERCH POND

LISBON

AQUATIC PLANTS  
5 JUL. 1988



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